

UNITED STATES NUCLEAR REGULATORY COMMISSION

REGION I 475 ALLENDALE ROAD KING OF PRUSSIA, PENNSYLVANIA 19406-1415

November 22, 2011

Mr. Kenneth Langdon, Vice President Nine Mile Point Nuclear Station, LLC Constellation Energy Nuclear Group, LLC P.O. Box 63 Lycoming, NY 13093

SUBJECT:

NINE MILE POINT NUCLEAR STATION - NRC PROBLEM IDENTIFICATION

AND RESOLUTION INSPECTION REPORT 05000220/2011008 AND

05000410/2011008

Dear Mr. Langdon:

On October 21, 2011, the United States Nuclear Regulatory Commission (NRC) completed an inspection at your Nine Mile Point Nuclear Station Units 1 and 2. The enclosed report documents the inspection results discussed with Mr. George Gellrich and other members of your staff.

This inspection examined activities conducted under your license as they relate to identification and resolution of problems, and compliance with the Commission's rules and regulations and conditions of your license. Within these areas, the inspection involved examination of selected procedures and representative records, observations of activities, and interviews with personnel.

Based on the samples selected for review, the inspectors concluded that Constellation was generally effective in identifying, evaluating, and resolving problems. Nine Mile Point personnel identified problems and entered them into the corrective action program at a low threshold. Nine Mile Point personnel prioritized and evaluated issues commensurate with the safety significance of the problems and corrective actions were generally implemented in a timely manner.

Based on the results of this inspection, no findings were identified.

In accordance with 10 CFR 2.390 of the NRC's "Rules of Practice," a copy of this letter, its enclosure, and your response (if any) will be available electronically for public inspection in the

NRC Public Document Room or from the Publicly Available Records (PARS) component of the NRC's document system (ADAMS). ADAMS is accessible from the NRC website at http://www.nrc.gov/reading-rm/adams.html (the Public Electronic Reading Room).

Sincerely,

Glenn T. Dentel, Chief Projects Branch 1

Division of Reactor Projects

Docket Nos.: 50-220, 50-410 License Nos.: DPR-63, NPF-69

Enclosure: Inspection Report 05000220/2011008 and 05000410/2011008

w/Attachment: Supplementary Information

cc w/encl: Distribution via ListServ

K. Langdon

NRC Public Document Room or from the Publicly Available Records (PARS) component of the NRC's document system (ADAMS). ADAMS is accessible from the NRC website at http://www.nrc.gov/reading-rm/adams.html (the Public Electronic Reading Room).

Sincerely,

/RA by Raymond J. Powell for/ Glenn T. Dentel, Chief Projects Branch 1 Division of Reactor Projects

Docket Nos.: 50-220, 50-410 License Nos.: DPR-63, NPF-69

Enclosure: Inspection Report 05000220/2011008 and 05000410/2011008

w/Attachment: Supplementary Information

cc w/encl: Distribution via ListServ

Distribution (via email):

W. Dean, RA

D. Lew, DRA

D. Roberts, DRP

D. Ayres, DRP

C. Miller, DRS

P. Wilson, DRS

M. Franke, RI OEDO

G. Dentel, DRP

N. Perry, DRP

J. Hawkins, DRP

K. Cronk, DRP

N. Floyd, DRP

K. Kolaczyk, DRP, SRI

D. Dempsey, DRP, RI

K. Kolek, DRP, OA

RidsNrrPMNineMilePointResource

RidsNrrDorlLpl1-1 Resource

ROPReportsResource

SUNSI Review Complete: NP (Reviewer's Initials)

ML113260049

DOCUMENT NAME: G:\DRP\BRANCH1\NINE_MILE_POINT\2011 PI&R\PIR REPORT 2011008 REV2.DOCX

After declaring this document "An Official Agency Record" it <u>will</u> be released to the Public.

To receive a copy of this document, indicate in the box: "C" = Copy without attachment/enclosure "E" = Copy with attachment/enclosure "N" = No copy

OFFICE mmt	RI/DRP	RI/DRP	RI/DRP
NAME	NPerryNP	RPowell/RJP	GDentel/NP for by phone
DATE	11/21 /11	11/21/11	11/21/11

OFFICIAL RECORD COPY

U.S. NUCLEAR REGULATORY COMMISSION

REGION I

Docket No.:

50-220, 50-410

License No.:

DPR-63, NPF-69

Report No.:

05000220/2011008; 05000410/2011008

Licensee:

Nine Mile Point Nuclear Station, LLC (NMPNS)

Facility:

Nine Mile Point, Units 1 and 2

Location:

Oswego, NY

Dates:

October 3 through 21, 2011

Team Leader:

Neil Perry, Senior Project Engineer, Division of Reactor Projects (DRP)

Inspectors:

D. Dempsey, Resident Inspector, DRP

N. Lafferty, Project Engineer, DRP K. Cronk, Project Engineer, DRP T. Ziev, Reactor Engineer, DRP

Approved by:

Glenn T. Dentel, Chief

Projects Branch 1

Division of Reactor Projects

SUMMARY OF FINDINGS

IR 05000220/2011008, 05000410/2011008; 10/03/2011 - 10/21/2011; Nine Mile Point Nuclear Station, Units 1 and 2; Biennial Baseline Inspection of Problem Identification and Resolution.

This NRC team inspection was performed by four regional inspectors and one resident inspector. The NRC's program for overseeing the safe operation of commercial nuclear power reactors is described in NUREG-1649, "Reactor Oversight Process," Revision 4, dated December 2006.

Problem Identification and Resolution

The inspectors concluded that Constellation was generally effective in identifying, evaluating, and resolving problems. Constellation personnel identified problems, entered them into the corrective action program at a low threshold, and prioritized issues commensurate with their safety significance. In most cases, Constellation appropriately screened issues for operability and reportability, and performed causal analyses that appropriately considered extent of condition, generic issues, and previous occurrences. The inspectors also determined that Constellation typically implemented corrective actions to address the problems identified in the corrective action program in a timely manner.

The inspectors concluded that, in general, Constellation adequately identified, reviewed, and applied relevant industry operating experience to Nine Mile Point operations. In addition, based on those items selected for review, the inspectors determined that Constellation's self-assessments and audits were thorough.

Based on the interviews the inspectors conducted over the course of the inspection, observations of plant activities, and reviews of individual corrective action program and employee concerns program issues, the inspectors did not identify any indications that site personnel were unwilling to raise safety issues nor did they identify any conditions that could have had a negative impact on the site's safety conscious work environment.

No findings were identified.

REPORT DETAILS

4. OTHER ACTIVITIES (OA)

4OA2 Problem Identification and Resolution (71152B)

This inspection constitutes one biennial sample of problem identification and resolution as defined by Inspection Procedure 71152. All documents reviewed during this inspection are listed in the Attachment to this report.

.1 Assessment of Corrective Action Program Effectiveness

a. Inspection Scope

The inspectors reviewed the procedures that described Constellation's corrective action program at Nine Mile Point Nuclear Station (NMPNS). To assess the effectiveness of the corrective action program, the inspectors reviewed performance in three primary areas: problem identification, prioritization and evaluation of issues, and corrective action implementation. The inspectors compared performance in these areas to the requirements and standards contained in 10 CFR 50, Appendix B, Criterion XVI, "Corrective Action," and Constellation procedure CNG-CA-1.01-1000, "Corrective Action Program." For each of these areas, the inspectors considered risk insights from the station's risk analysis and reviewed condition reports (CRs) selected across the seven cornerstones of safety in the NRCs Reactor Oversight Process. Additionally, the inspectors attended multiple Plan-of-the-Day meetings, screening meetings, and Management Review Committee meetings. The inspectors selected items from the following functional areas for review: engineering, operations, maintenance, emergency preparedness, radiation protection, chemistry, physical security, and oversight programs.

(1) Effectiveness of Problem Identification

In addition to the items described above, the inspectors reviewed system health reports, a sample of completed corrective and preventive maintenance work orders, completed surveillance test procedures, and periodic trend reports. The inspectors also completed field walkdowns of various systems on site, such as the emergency diesel generator (EDG) and liquid poison systems. Additionally, the inspectors reviewed a sample of CRs written to document issues identified through internal self-assessments, audits, emergency preparedness drills, and the operating experience program. The inspectors completed this review to verify that Constellation entered conditions adverse to quality into their corrective action program as appropriate.

(2) Effectiveness of Prioritization and Evaluation of Issues

The inspectors reviewed the evaluation and prioritization of a sample of CRs issued since the last NRC biennial Problem Identification and Resolution inspection completed in October 2009. The inspectors also reviewed CRs that were assigned lower levels of significance that did not include formal cause evaluations to ensure that they were properly classified. The inspectors' reviews included the appropriateness of the assigned significance, the scope and depth of the causal analysis, and the timeliness of resolution. The inspectors assessed whether the evaluations identified likely causes for the issues and developed appropriate corrective actions to address the identified

causes. Further, the inspectors reviewed equipment operability determinations, reportability assessments, and extent-of-condition reviews for selected problems to verify these processes adequately addressed equipment operability, reporting of issues to the NRC, and the extent of the issues.

(3) Effectiveness of Corrective Actions

The inspectors reviewed Constellation's completed corrective actions through documentation review and, in some cases, field walkdowns to determine whether the actions addressed the identified causes of the problems. The inspectors also reviewed CRs for adverse trends and repetitive problems to determine whether corrective actions were effective in addressing the broader issues. The inspectors reviewed Constellation's timeliness in implementing corrective actions and effectiveness in precluding recurrence for significant conditions adverse to quality. The inspectors also reviewed a sample of CRs associated with selected non-cited violations (NCVs) and findings to verify that Constellation personnel properly evaluated and resolved these issues. In addition, the inspectors expanded the corrective action review to five years to evaluate Constellation actions related to Unit 1 liquid poison deficiencies and Unit 2 feedwater issues.

b. Assessment

(1) Effectiveness of Problem Identification

Based on the selected samples, plant walkdowns, and interviews of site personnel in multiple functional areas, the inspectors determined that Constellation generally identified problems and entered them into the corrective action program at a low threshold. Constellation staff at NMPNS initiated approximately 23,000 CRs between October 2009 and September 2011. The inspectors observed supervisors at the Planof-the-Day meetings, screening meetings, and Management Review Committee meetings appropriately questioning and challenging CRs to ensure clarification of the issues. Based on the samples reviewed, the inspectors determined that Constellation trended equipment and programmatic issues, and appropriately identified problems in CRs. The inspectors verified that conditions adverse to quality identified through this review were entered into the corrective action program as appropriate. Additionally, the inspectors concluded that personnel were identifying trends at low levels. Although issues and concerns were generally identified and entered into the corrective action program, the inspectors identified some instances not yet identified by Constellation including the Unit 2 EDG air start system valves inadequately locked, carts improperly stored in the power block, broken clips on the 103 EDG valve covers, and water on the floor in the 102 EDG switchgear room.

The inspectors independently evaluated these deficiencies for significance in accordance with Inspection Manual Chapter (IMC) 0612, Appendix B, "Issue Screening," and IMC 0612, Appendix E, "Examples of Minor Issues." None of the examples had a significant impact on plant operations or equipment operability. The inspectors considered these issues to be of minor significance, and, as a result, not subject to enforcement action in accordance with the NRC's Enforcement Policy.

(2) Effectiveness of Prioritization and Evaluation of Issues

The inspectors determined that, in general, Constellation appropriately prioritized and evaluated issues commensurate with the safety significance of the identified problem. Constellation screened CRs for operability and reportability, categorized the CRs by significance, and assigned actions to the appropriate department for evaluation and resolution. The CR screening process considered human performance issues, radiological safety concerns, repetitiveness, adverse trends, and potential impact on the safety conscious work environment.

Based on the sample of CRs reviewed, the inspectors noted that the guidance provided by Constellation corrective action program implementing procedures appeared sufficient to ensure consistency in categorization of issues. Operability and reportability determinations were generally performed when conditions warranted and in most cases, the evaluations supported the conclusion. Causal analyses appropriately considered the extent of condition or problem, generic issues, and previous occurrences of the issue. However, the inspectors identified an unresolved item (URI) where NMPNS personnel were not effective in evaluating an issue and implementing effective corrective actions. This URI is documented in Section 4OA2.1.c.

(3) Effectiveness of Corrective Actions

The inspectors concluded that corrective actions for identified deficiencies were generally timely and adequately implemented. For significant conditions adverse to quality, Constellation identified actions to prevent recurrence. The inspectors concluded that corrective actions to address the sample of NRC NCVs and findings since the last problem identification and resolution inspection were timely and effective. The inspectors did observe some weaknesses in Constellation's resolution of degraded conditions. For example:

- A corrective action was not completed as detailed in the corrective action program
 for adding a step to a maintenance procedure for the Unit 2 EDGs regarding adding
 a normal temperature band for the jacket water system. The temperature band was
 for trending and did not affect alarms that the operators would receive for abnormal
 temperatures.
- A corrective action was not completed for adding a step to an operations procedure
 for draining the reactor cavity regarding establishing the accuracy of the utilized level
 indications. Numerous other actions were taken to ensure the reactor cavity draining
 would be completed in a controlled manner with accurate, redundant indication.
- An issue regarding the reduced capacity of the floor drain system in Unit 1 was identified in March and August 2011. However, corrective actions to address the issue were not aggressively pursued until October 2011.
- An adverse trend regarding poor plant lighting conditions (bulbs needing replacement) was identified in June 2011. However, long term corrective actions were not implemented until October 2011. Temporary lighting and flashlights were being relied upon until the permanent lighting was properly restored.

The inspectors independently evaluated these issues for significance in accordance with IMC 0612, Appendix B, "Issue Screening," and IMC 0612, Appendix E, "Examples of Minor Issues." None of the examples had a significant impact on plant operations or equipment operability. The inspectors consider these issues to be of minor significance, and, as a result, not subject to enforcement action in accordance with the NRC's Enforcement Policy.

c. Findings

Non-Safety Related Molded-Case Circuit Breaker Preventive Maintenance

<u>Introduction</u>: The inspectors identified a URI associated with NMPNS's failure to meet the fleet standard for applying preventive maintenance (PM) templates for Critical, non-safety related (NSR) molded-case circuit breakers (MCCBs).

<u>Description</u>: In 2006, NMPNS began to apply Electric Power Research Institute (EPRI) recommended PM templates to NSR MCCBs. During the application process, NMPNS classified NSR MCCBS as Critical, Significant, Economic, or Run-to-Failure, and determined the PM activities to be performed. NMPNS appropriately classified breakers and assigned PM tasks using the site procedures and industry guidance available at that time.

In 2007, two new procedures, CNG-AM-1.01-1018 "Preventive Maintenance Program," and CNG-AM-1.01-2000 "Scoping and Identification of Critical Components," were issued. CNG-AM-1.01-2000 requires a component to be classified as Critical if a functional failure would result in one of the following undesirable plant consequences: reactor scram/trip from any power level; loss of generation (shutdown, downpower/derate >20%, or delay a unit Mode Change in startup); unplanned technical specification entry that requires shutdown with an action constraint of 72 hours or less; engineered safety feature (ESF) actuation, half-scram or half-ESF actuation that cannot be immediately reset; failure to control a critical function (level, temperature, pressure) of any of the following: reactor, primary containment, secondary containment, or fuel pool, or loss of any Maintenance Rule High Risk function; degradation of primary or secondary containment; degradation of capability to achieve or maintain cold shutdown; or loss of Emergency Operating Procedure function. NMPNS reviewed components that had previously been classified as Critical to ensure that the classification and PM activities complied with the new procedures.

In 2009, fleet engineering standard CNG-FES-039 "Preventive Maintenance Template Development, Review, Analysis and Application," was issued. This standard states that "PM Template deviations for Critical components should be rarely applied and should only be reserved for severe/hardship situations," for non-conservative deviations. The inspectors identified several differences between the templates and actual PMs completed for NSR breakers, including scope and frequency of clean and inspect of Critical breakers, and thermography of breakers.

In 2008, NMPNS missed an opportunity to re-evaluate if the "clean and inspect" PM task should be performed on NSR MCCBs based on operating experience. In 2008, NRC Information Notice (IN) 08-18 "Loss of a Safety-Related Motor Control Center Caused by a Bus Fault," identified high resistance stab connections as the primary cause of a fire. The IN identified poor PM as one of the causes of the high resistance connection. Upon

receiving IN08-18, NMPNS reviewed the PM templates for safety-related MCCBs, but not NSR MCCBs. In June 2011, NMPNS experienced a fire on a Significant NSR breaker, resulting in the declaration of an Unusual Event.

The differences between the PM templates and actual station practices is unresolved pending inspector determination if a performance deficiency exists and if this issue is more than minor. (URI 05000220, 410/2011008-01, Inconsistencies Between Non-Safety Related Breaker Preventive Maintenance Templates and Station Practices.

.2 <u>Assessment of the Use of Operating Experience</u>

a. Inspection Scope

The inspectors reviewed a sample of CRs associated with review of industry operating experience to determine whether Constellation appropriately evaluated the operating experience information for applicability to NMPNS and had taken appropriate actions, when warranted. The inspectors also reviewed evaluations of operating experience documents associated with a sample of NRC generic communications to ensure that Constellation adequately considered the underlying problems associated with the issues for resolution via their corrective action program. In addition, the inspectors observed various plant activities to determine if the station considered industry operating experience during the performance of routine and infrequently performed activities.

b. <u>Assessment</u>

The inspectors determined that Constellation appropriately considered industry operating experience information for applicability, and used the information for corrective and preventive actions to identify and prevent similar issues when appropriate. The inspectors determined that operating experience was appropriately applied and lessons learned were communicated and incorporated into plant operations and procedures when applicable. The inspectors also observed that industry operating experience was routinely discussed and considered during the conduct of Plan-of-the-Day meetings and pre-job briefs.

c. <u>Findings</u>

No findings were identified.

.3 Assessment of Self-Assessments and Audits

a. Inspection Scope

The inspectors reviewed a sample of audits, including the most recent audit of the corrective action program, departmental self-assessments, and assessments performed by independent organizations. Inspectors performed these reviews to determine if Constellation entered problems identified through these assessments into the corrective action program, when appropriate, and whether Constellation initiated corrective actions to address identified deficiencies. The inspectors evaluated the effectiveness of the audits and assessments by comparing audit and assessment results against self-revealing and NRC-identified observations made during the inspection.

b. Assessment

The inspectors concluded that self-assessments, audits, and other internal Constellation assessments were generally critical, thorough, and effective in identifying issues. The inspectors observed that Constellation personnel knowledgeable in the subject completed these audits and self-assessments in a methodical manner. Constellation completed these audits and self-assessments to a sufficient depth to identify issues which were then entered into the corrective action program for evaluation. In general, the station implemented corrective actions associated with the identified issues commensurate with their safety significance.

c. Findings

No findings were identified.

.4 Assessment of Safety Conscious Work Environment

a. Inspection Scope

During interviews with station personnel, the inspectors assessed the safety conscious work environment at NMPNS. Specifically, the inspectors interviewed personnel to determine whether they were hesitant to raise safety concerns to their management and/or the NRC. The inspectors also interviewed the station Employee Concerns Program coordinator to determine what actions are implemented to ensure employees were aware of the program and its availability with regards to raising safety concerns. The inspectors reviewed the Employee Concerns Program files to ensure that Constellation entered issues into the corrective action program when appropriate.

b. Assessment

During interviews, NMPNS staff expressed a willingness to use the corrective action program to identify plant issues and deficiencies and stated that they were willing to raise safety issues. The inspectors noted that no one interviewed stated that they personally experienced or were aware of a situation in which an individual had been retaliated against for raising a safety issue. All persons interviewed demonstrated an adequate knowledge of the corrective action program and the Employee Concerns Program. Based on these limited interviews, the inspectors concluded that there was no evidence of an unacceptable safety conscious work environment and no significant challenges to the free flow of information.

c. Findings

No findings were identified.

4OA6 Meetings, Including Exit

On October 21, 2011, the inspectors presented the inspection results to Mr. George Gellrich, Acting Site Vice President, and other members of the NMPNS staff. The inspectors verified that no proprietary information was retained by the inspectors or documented in this report.

ATTACHMENT: SUPPLEMENTARY INFORMATION

SUPPLEMENTARY INFORMATION

KEY POINTS OF CONTACT

Licensee Personnel

- G. Gellrich, Acting Site Vice President
- M. Flaherty, Acting Plant General Manager
- L. Martiniano, Quality and Performance Assessment
- M. Shanbhag, Licensing
- P Swift, Engineering Manager
- D. Wolniak, Performance Improvement Unit Director

NRC Personnel

K. Kolaczyk, Senior Resident Inspector

LIST OF ITEMS OPENED, CLOSED, DISCUSSED, AND UPDATED

Opened

05000220.410/2011008-01

URI

Inconsistencies Between Non-Safety Related Breaker Preventive Maintenance Templates and Station Practices

LIST OF DOCUMENTS REVIEWED

Section 40A2: Problem Identification and Resolution

Audits and Self-Assessments

CAP-09-01-N, Corrective Action Program Audit Report 2009

FPP-09-01-N. Fire Protection Audit Report 2009

MAI-09-01-N, Maintenance Report of Audit 2009

QPA Assessment Report 09-049, Elective Maintenance Backlog

- QPA Assessment Report 09-083, USA Nuclear Safety Culture Assessment
- QPA Assessment Report 09-092, Stations Response to Liquid Poison Pump Issue
- QPA Assessment Report 11-001, Nine Mile Point-Fleet Type II Nuclear Safety Culture Assessment
- QPA Snap-Shot Self Assessment SA-2010-000082, Fire Brigade Fire Drill Results 2nd/3rd Quarter
- QPA Snap-Shot Self Assessment SA-2010-000113, Training Maintenance Training Advisory Committee (TAC) Effectiveness
- QPA Snap-Shot Self Assessment SA-2011-000170, Employee Concerns Program (ECP) Postings, Office Space and Files

SA-2009-000019, Evaluate Use of OE during Pre-job Briefings

SA-2011-000020, Perform An Interim Self-Assessment Of Cat. 1 And 2 Condition Reports

SA-2011-000059, Use of OE during N1R21

SA-2011-000125, Review of prioritized as Priority 1 OE

SA-2011-000142, Chemistry Activities during Work Stoppage

SA-2011-000155, Review of 2nd quarter 2011 ALARA Committee Effectiveness

Condition Reports

2001-009673	2009-001128	2009-006914	2010-001400
2006-000336	2009-001413	2009-006961	2010-001429
2006-001730	2009-002620	2009-007029	2010-001431
2006-001772	2009-002726	2009-007129	2010-001457
2006-003352	2009-002973	2009-007201	2010-001546
2006-004642	2009-003026	2009-007417	2010-001657
2007-000236	2009-003209	2009-007442	2010-001901
2007-000230	2009-003225	2009-007457	2010-001969
2007-000433	2009-003384	2009-007589	2010-001303
2007-002332	2009-003394	2009-007624	2010-002002
2007-002709	2009-003394	2009-007838	2010-002003
2007-002745	2009-003526	2009-007964	2010-002004
2007-005700	2009-003632	2009-007904	2010-002202
2007-005538	2009-003032	2009-008089	2010-002352
2007-005556	2009-004308	2009-008141	2010-002574
2007-006582	2009-004914	2009-008156	2010-002574
2007-000302	2009-005044	2009-008157	2010-002685
2007-007031	2009-005091	2009-008248	2010-002005
2007-007074	2009-005398	2009-008503	2010-002735
2008-000095	2009-005520	2009-008503	2010-002903
2008-000240	2009-005943	2009-000303	2010-003000
2008-000818	2009-005983	2009-008787	2010-003746
2008-001177	2009-005903	2009-008795	2010-003740
2008-001212	2009-006022	2009-008848	2010-004110
2008-001511	2009-006165	2009-008928	2010-004110
2008-001816	2009-006238	2010-000101	2010-004152
2008-003241	2009-006244	2010-000101	2010-004207
2008-004001	2009-006299	2010-000195	2010-004703
2008-005483	2009-006305	2010-000195	2010-004727
2008-005611	2009-006370	2010-000239	2010-005289
2008-006698	2009-006396	2010-000429	2010-005203
2008-008189	2009-006526	2010-000429	2010-005380
2009-000779	2009-006564	2010-000629	2010-005550
2009-000779	2009-006701	2010-000701	2010-005653
2009-000012	2009-006838	2010-000782	2010-005702
2009-001093	2009-006906	2010-000762	2010-005702
2003-001110	2003-000300	2010-0010 1 0	2010-000108

2010-005985	2010-009163	2011-001831	2011-006404
2010-005997	2010-009344	2011-001833	2011-006507
2010-006069	2010-009502	2011-001845	2011-006579
2010-006122	2010-009721	2011-001968	2011-006753
2010-006250	2010-009756	2011-002036	2011-007017
2010-006253	2010-009919	2011-002556	2011-007034
2010-006253	2010-010023	2011-002566	2011-007104
2010-006261	2010-010057	2011-002692	2011-007171
2010-006518	2010-010366	2011-003005	2011-007234
2010-006647	2010-010407	2011-003063	2011-007269
2010-006647	2010-010832	2011-003266	2011-007382
2010-007112	2010-011008	2011-003628	2011-007469
2010-007218	2010-012039	2011-003758	2011-007482
2010-007412	2010-012327	2011-003857	2011-008227
2010-007473	2011-000143	2011-004047	2011-008263
2010-007752	2011-000257	2011-004407	2011-008364
2010-007752	2011-000358	2011-004408	2011-008640
2010-008024	2011-000389	2011-004459	2011-008657
2010-008025	2011-000421	2011-004536	2011-008659
2010-008245	2011-000511	2011-004687	2011-008660
2010-008443	2011-000799	2011-005023	2011-008718
2010-008444	2011-000820	2011-005024	2011-008757
2010-008481	2011-000865	2011-005592	2011-008810
2010-008481	2011-001131	2011-005652	2011-008913
2010-008508	2011-001253	2011-005712	2011-009216
2010-008595	2011-001476	2011-005993	2011-009387
2010-008645	2011-001543	2011-006079	2011-009403
2010-008723	2011-001593	2011-006266	2011-009410
2010-008834	2011-001656	2011-006273	2011-009411
2010-008858	2011-001801	2011-006399	2011-009514
			· -

LERs

- NMP1 2009-003-00, Manual Scram and High Pressure Coolant Injection Following a Loss of Feedwater Level Control Due to Firmware Deficiency
- NMP1 2010-001-00, Reactor Scram Due to Inadequate Post-Maintenance Testing
- NMP1 2011-001-00, Turbine Trip Due to Oil Pressure Fluctuations to the Turbine Master Trip Solenoid
- NMP2 2009-001-00, Momentary Loss of Control Power to High Pressure Core Spray Pump Due to Degraded Fuse Block Connection
- NMP2 2010-001-01, Reactor Scram Due to Inadvertent Actuation of the Redundant Reactivity Control System During Maintenance

NCVs and Findings

- Unit 1 NCV 2009005-01, Two APRMs Inoperable Contrary to Procedure Requirement
- Unit 2 NCV 2009009-01, Failure to Identify Procedural Inadequacies and Non-Compliances that Contributed to the November 4, 2008, SW Pumps Foreign Material Intrusion Events
- Unit 1 FIN 2009010-01, Failure to Properly Scope the SPDS Function of the Plant Process Computer into the Maintenance Rule
- Unit 2 FIN 2010002-01, Inadequate Maintenance Procedure Results in Loss of Loads for Non-Vital UPS
- Unit 2 NCV 2010002-02, Inadequate Performance Testing of Division 1 Battery
- Unit 2 NCV 2010002-03, Reactor Scram Due to Inadequate Procedure for RHR Detector Restoration
- Unit 2 NCV 2010003-01, Excessive Reactor Pressure Vessel Drain Down Due to Inadequate Procedure
- Unit 2 FIN 2010004-01, Failure to Maintain Radiation Exposure ALARA During RHR System Modification
- Unit 2 FIN 2010004-02, Failure to Maintain Radiation Exposure ALARA During Refueling Floor Activities
- Unit 1 NCV 2010005-01, Reactor Scram due to Inadequate Post-Maintenance Testing
- Unit 2 NCV 2011002-01, Inadequate Identification and Corrective Actions for Emergency Diesel Generator Temperature Control Valve Degradation
- Unit 1 NCV 2011002-02, Inadequate Corrective Actions to Correct Motor Control Center Spring Clip Engagement Issues
- Unit 1 FIN 2011003-01, Inadequate Procedural Guidance for Main Turbine and Generator Maintenance Activities

Operating Experience

- OE-2009-002707, IN09-16 Spurious Relay Actuations Result in Loss of Power to Safeguards
 Buses
- OE-2009-003154, IN09-26 Degradation of Neutron-absorbing Materials in the Spent Fuel Pool
- OE-2010-000540, IN10-06 Inadvertent Control Rod Withdraw Event While Shutdown
- OE-2010-001171, TYCO (Part 21) Vendor Notification #45862
- OE-2010-001979, GE Hitachi Nuclear Energy (Part 21) Vendor Notification #46060
- OE-2010-002172, IN10-13 Failure to Ensure that Post-fire Shutdown Procedure can be Performed
- OE-2010-002366, Braidwood SCRAM #46178
- OE-2010-002764, IN10-20 Turbine-Drive Auxiliary Feedwater Pump Repetitive Failures
- OE-2010-002923, IN10-21 Crack-like Indication in the U-bend Region of a Thermally Treated Alloy 600 Steam Generator Tube
- OE-2011-000338, IN11-02 Operator Performance Issues Involving Reactivity Management at Nuclear Power Plants
- OE-2011-001319, IN11-09 Fixed Gauge Shutter Failures Due to Operating in Harsh Working Environments
- OE-2011-001601, Fitzpatrick (Part 21) Log No. 2011-32-00
- OE-2011-001861, IN11-14 Component Cooling Water System Gas Accumulation and Other Performance Issues

Procedures

```
CNG-CA-1.01-1000, Corrective Action Program, Revision 00500
CNG-CA-1.01-1000, Corrective Action Program, Revision 00501
CNG-CA-1.01-1004, Root Cause Analysis, Revision 00800
CNG-CA-1.01-1005, Apparent Cause Evaluation, Revision 00600
CNG-CA-1.01-1007, Performance Improvement Program Trending and Analysis,
       Revision 00300
CNG-CA-1.01-1009, Change Management, Revision 00100
CNG-CA-1.01-1010, Use of Operating Experience, Revision 00400
CNG-CA-1.01-1011, Management Observation Program, 00300
CNG-CA-2.01-1000, Self-Assessment and Benchmarking Process, Revision 00400
CNG-EP-1.01-1006, Drill and Exercise Scheduling and Preparation, Revision 00100
CNG-EP-1.01-1007, Evaluation and Documentation of Drills, Exercises and Classified Events,
       Revision 00000
CNG-FES-007 - Preparation of Design Inputs and Change Impact Screen, Revision 00011
CNG-MN-4.01-1000, Work Order Initiation, Screening and Prioritization, Revision 3
CNG-MN-4.01-1003, Work Order Planning, Revision 00500
CNG-MN-4.01-1008, Pre/Post-Maintenance Testing, Revision 00100
CNG-MN-4.01-GL002, Post Maintenance Test and Post Maintenance Operability Test
       Requirements Guideline, Revision 0
CNG-OM-1.01-1000, Outage Management, Revision 00501
CNG-OP-1.01-1001, Operational Decision Making, Revision 00300
CNG-OP-1.01-1002, Operability Determination Process, Revision 00101
CNG-OP-4.01-1000, Integrated Risk Management, Revision 00900
CNG-QL-1.01-1004, Quality Audit Process, Revision 00400
CNG-QL-3.01-1001, Safety Conscious Work Environment and Employee Concerns Program,
      Revision 00200
CNG-TR-1.01-1000, Conduct of Training, Revision 00600
CNG-TR-1.01-1002, Performance/Needs Analysis Worksheet, Revision 200
CNG-TR-1.01-1003, Design Phase Activities, Revision 00200
CNG-TR-1.01-1005, Implementation Phase Activities, Revision 00200
CNG-TR-1.01-1016, Maintenance Supervisor Training Program, Revision 00201
EPIP-EPP-20, Emergency Notifications, Revision 02600
EPIP-EPP-30, Prompt Notification System Problem Response, Revision 01100
EPMP-EPP-0102, Unit 2 Emergency Classification Technical Bases, Revision 01800
GAI-MAI-01, Maintenance Pre-job Preparation and Walkdowns, Revision 01500
GAI-OPS-20, Transient Mitigation Guidelines (TMG), Revision 05
GAP-INV-02, Control of Material Storage Areas, Revision 02500
GAP-OPS-01, Administration of Operations, Revision 06001
IC-FIC-GRYBT, I&C, Make/Remake Grayboot Connections Lesson Plan, Revision 1
IC-FIL-GRYBT, I&C Technician Nuclear Training Program Grayboot Laboratory
N1-EPM-FPM-M001, Emergency Lighting Inspection, Revision 00101
N1-IMP-LEV-MON, Reactor Level Monitoring, Revision 00300
N1-IPM-029-010, Rework/Replacement of Valve Positioning Instrumentation for Feedwater
      Valves ID11A, ID11B, ID12A, and ID12B, Revision 00700
N1-ISP-036-004, Low-Low Reactor Level Instrument Tip Channel Test/Calibration, Revision 201
N1-OP-38A, Source Range Monitors, Revision 02000
```

N1-OP-38B, Intermediate Range Monitors, Revision 02000 N1-OP-38C, Local Power Range Monitors, Revision 02000

N1-PM-34, Reactor Cavity Flood Up and Drain Down, Revision 00300

N1-PM-S1, Operator's Rounds Guide, Revision 1900

N1-SOP-21.1, Fire In Plant, Revision 00400

N1-ST-M4A, Emergency Diesel Generator 102 and PB 102 Operability Test, Revision 00500

N1-ST-M4B, Emergency Diesel Generator 103 and PB 103 Operability Test, Revision 00500

N1-VLU-01, Valve Lineup and Valve Operations, Revision 02

N2-EPM-GEN-V624, UPS Inverter Functional Checks, Cleaning and Inspection, Revision 01000

N2-IPM-RRC-R005, Standby Liquid Control Tank Level Calibration, Revision 00600

N2-IPM-UPS-100, Control Alignment Procedure for EXIDE 75 KVA Uninterruptable Power Systems, Revision 00101

N2-MFT-184, Feedwater Pump/Min Flow Valve Testing, Revision 00100

N2-MSP-CNT-R005, Primary Containment Structural Integrity Inspection and Suppression Pool Cleaning, Revision 01101

N2-OP-34, Condensate and Feedwater System, Revision 02900

N2-OP-92, Neutron Monitoring, Revision 00701

N2-OP-115, Alternate Decay heat Removal System, Revision 00700

N2-OSP-EGS-M@001, Diesel Generator and Diesel Air Start Valve Operability Test – Division I and II, Revision 00800

N2-OSP-EGS-M@002, Diesel Generator and Diesel Air Start Valve Operability Test – Division III, Revision 00800

N2-OSP-ISC-R301, ATWS Recirc Pump Trip Logic System Functional Test, Revision 00401

N2-PM-082, RPV Flood up / Draindown, Revision 00400

N2-PM-S014, Building Rounds, Revision 1300

N2-SOP-08, Unplanned Power Changes, Revision 00701

N2-SOP-29, Sudden Reduction in Flow, Revision 01200

N2-SOP-31R, Refueling Operations Alternate Shutdown Cooling, Revision 00800

N2-SOP-71, Loss of 2VBB-UPS1A, 1B, 1G, Revision 04

N2-VLU-01, Walkdown Order Valve Lineup and Valve Operations, Revision 00

NAI-MAI-10, Maintenance Crew Level Management Review Meeting, Revision 03.01

NER-1M-080, Miscellaneous Non-Safety Related Vessel Internals Inspection and Evaluation, Revision 04

NIP-EPP-01, Emergency Response Organization Expectations and Responsibilities, Revision 03000

NMP-TR-1.01-500, Common Site Training Programs, Revision 00600

S-EMP-GEN-004, Insulation of Power, Control, and Instrument Cable Connections, Revision 00200

S-EPM-GEN-063, Limitorque MOV Testing, Revision 00600

S-EPM-GEN-081, Site 13.8 & 4.16 KV Motor Inspection P.M., Revision 00102

S-EPM-GEN-813, Annual Inspection of Emergency Battery Light (EBL) Units, Revision 00100

S-SAD-FP-0105, Compensatory Measures for Inoperable Fire Protection Systems and Components, Revision 01800

Work Orders

C91062295

C91106136

C91106138

C91403808

C91159811

Miscellaneous

A10.2-A-090, MOV Sizing Calculation for 2FWS-LV10A/B/C, Revision 02

Calculation 1000646.302, Nine Mile Point 2 Min Flow Line Evaluation, Revision 1

Feedwater System Health Report, July 1, 2011-September 30, 2011

H21C-027, Shield Plug, Revision 1

July 2011 Results Nuclear Safety Culture Electronic Survey

NDE Report 2-6.05-08-0027, 2IAS-TK1C Ultrasonic Thickness Measurement, dated August 15, 2008

Nine Mile Point Nuclear Safety Culture Electronic Survey Final Data 7/06/2011

NUREG-1047, Safety Evaluation Report related to the operation of Nine Mile Point Nuclear Station Unit No. 2, Supplement No. 4, dated September 1986

Refuel Services ALARA Plan

S13.4-70HX03, Reactor Building Closed Loop Cooling Heat Exchanger Thermal Performance Evaluation, Revision 03.00

S22.4-68AOV001, Component Level Assessment of IV 68-08, -09, 10, Revision 00

Unit One Liquid Poison System Health Report (4/1/2011 – 6/30/2011)

Unit One Process Computer System Health Report (4/1/2011 – 6/30/2011)

Vendor Manual N1E09669MISE002

Vendor Manual N2E09669MISE001

LIST OF ACRONYMS

ADAMS Agency-wide Documents Access and Management System

CFR Code of Federal Regulations

CR Condition Report

DRP Division of Reactor Projects
EDG Emergency Diesel Generator
EPRI Electric Power Research Institute

ESF Engineered Safety Feature IMC Inspection Manual Chapter

IN Information Notice

MCCB Molded-Case Circuit Breaker

NCV Non-Cited Violation

NMPNS Nine Mile Point Nuclear Station, LLC NRC Nuclear Regulatory Commission

NSR Non-Safety Related

PARS Publicly Available Records System
PCM Performance Centered Maintenance

PM Preventive Maintenance

SDP Significance Determination Process

SRV Safety Relief Valve
TS Technical Specifications

URI Unresolved Item